

ER1Q-L

Features

- Epoxy meets UL 94 V-0 flammability rating
- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)
- For surface mount applications
- Extremely low thermal resistance
- High temp soldering: 260°C for 10 seconds at terminals
- Super fast recovery time for high efficiency
- Moisture sensitivity level 1
- Perfect for Ballast, television and monitor applications
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings

- Operating Temperature: -50°C to +150°C
- Storage Temperature: -50°C to +150°C
- Maximum Thermal Resistance: 15°C/W Junction To Lead

Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
ER1Q-L	ER1Q	1200V	840V	1200V

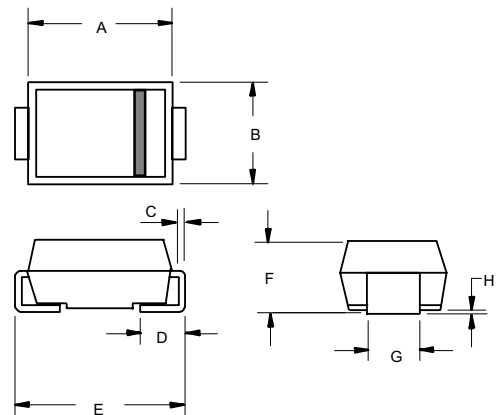
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	$T_a = 55^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	1.85V	$I_{FM} = 1.0A;$ $T_J = 25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5 μA 30 μA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Maximum Reverse Recovery Time	T_{rr}	150ns	$I_F=0.5A, I_R=1.0A,$ $I_{rr}=0.25A$
Typical Junction Capacitance	C_J	45pF	Measured at 1.0MHz, $V_R=4.0V$

*Pulse test: Pulse width 200 μsec , Duty cycle 2%

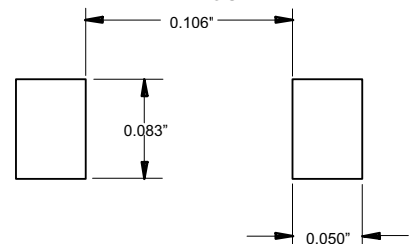
1 Amp Super Fast Recovery Silicon Rectifier 1200 Volts

DO-214AA (SMB) (LEAD FRAME)



DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.160	.185	4.06	4.70	
B	.130	.155	3.30	3.94	
C	.006	.012	0.15	0.31	
D	.030	.060	0.76	1.52	
E	.200	.220	5.08	5.59	
F	.079	.096	2.00	2.44	
G	.075	.087	1.91	2.21	
H	.002	.008	0.05	0.203	

SUGGESTED SOLDER PAD LAYOUT



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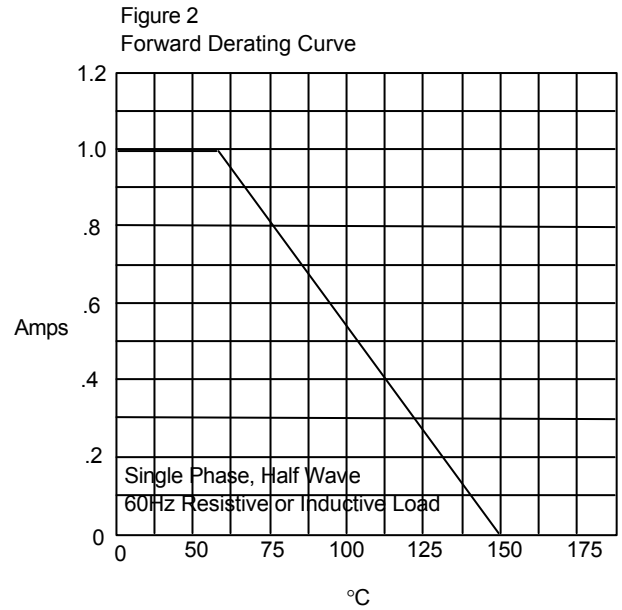
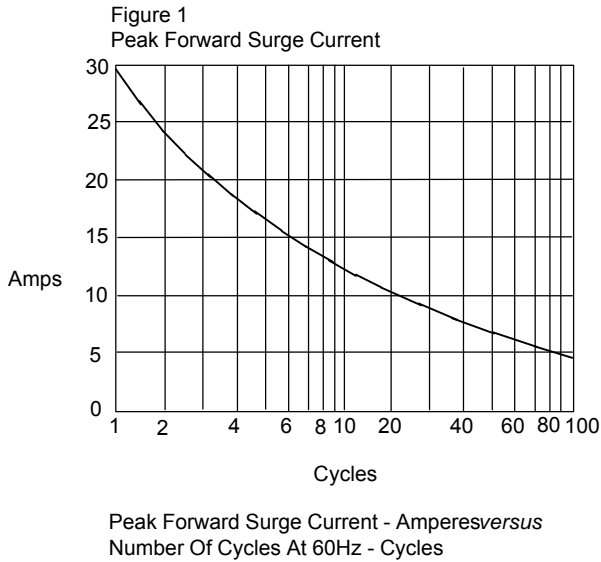
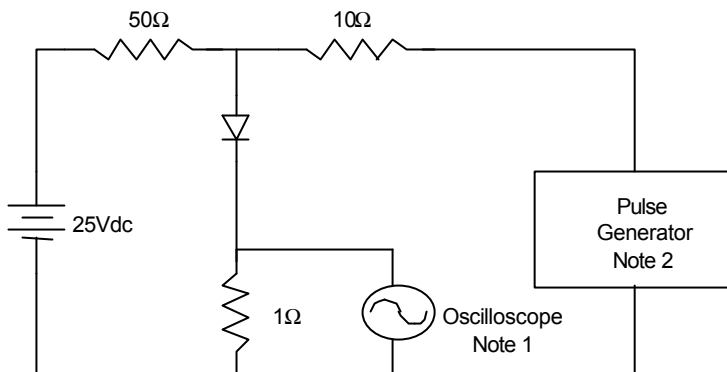
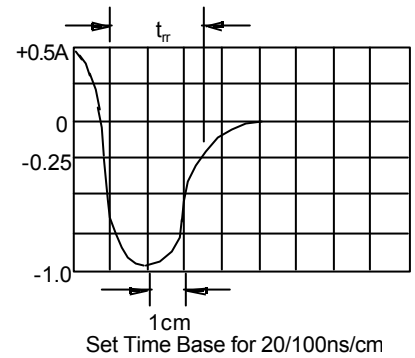


Figure 3
Reverse Recovery Time Characteristic And Test Circuit Diagram



- Notes:
1. Rise Time = 7ns max.
Input impedance = 1 megohm, 22pF
 2. Rise Time = 10ns max.
Source impedance = 50 ohms
 3. Resistors are non-inductive





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Ordering Information :

Device	Packing
ER1Q-LTP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. ER1Q-LTP-HF

*****LIFE SUPPORT*****

ZBMCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of ZiBo Micro Commercial Components Corp.

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